

QUESTION AND ANSWERS MAST, RADIO/STUDIO TRANSMITTER and MAST

Question.

Thank you for the update on the Radio transmitter, Studio, 100M Mast, and Solar power Solicitations. We have noticed a few things in your update and we are writing to seek further clarification on the following.

1. "The radios shall be able to achieve a 125KM radius" Unlike MW or AM frequencies, achieving long distance coverage with FM is very much dependant on transmitter power, local terrain, antenna height and antenna gain. It is generally tricky to achieve 125km radius coverage with FM broadcasting but that goal is further constrained by what we have already stated and that's further compounded if the transmitter power is low. In this case, the proposed 1kw transmitter is of low power to achieve your intended coverage of 125km. If coverage distance is PARAMOUNT to this project then we are recommending you substitute the proposed 1kw transmitter with a 3kw transmitter. Be warned though, doing so will automatically have an impact on your solar power requirements as they will have to be upgraded to meet the high energy consumption of a 3kw transmitter. PS. with a 1kw setup you will comfortably achieve distances of about 60 - 80km depending on local terrain.
2. "We would like to have 3 voice recorders as well". Is that 3 recorders for each of the two stations or is it a total of 3 recorders for both stations i.e. Ango Town and Djema?
3. "For mics, We prefer 6 with 6 stands and 6 headsets". Please clarify, is that 6 stands, 6 mics and 6 headsets for each of the two stations or is it the total number for both stations i.e. Ango Town and Djema, 3 sets for each station?
4. "A mixer with 8 inputs is adequate". I am afraid a mixer with 8 inputs isn't adequate if you're going to have 6 mics connected to it as that will leave you with **TWO** inputs for the **play out system, the telephone channel, the MP3 player and MP3 Recorder**. Please note, a professional sound card (usually connected to the PC to air music and pre-recorded voices) can have **FOUR** channels, so an 8 input mixer leaves you with **ONLY TWO** channels to connect all the equipment listed above, something that's impossible as you may have already figured. Please allow us to suggest a mixer with **14 input channels minimum** of which **SIX** should be dedicated mic channels with phantom power (assuming you want to have 6 mics connected to one mixer) and the remaining 8 channels to be used for the listed equipment.

5. The chain link around that station shall be a minimum of 7ft high. Can you please tell us the **total perimeter area** to be secured with the proposed chain link? Is it for the mast alone or the entire surrounding including the studio building and the bank of solar panels?

6. "We will also need the mast pegs, anchors, and guy wires, and fencing as estimated". Will you consider a **FREE STANDING** Lattice mast as an alternative to a guyed line mast? Indeed, a free standing mast is more costly than a guyed line mast , however it occupies less ground space unlike a guyed one that requires large space for the guyed lines to achieve mast stability.

7. Regarding the station building in Djema, we will reserve our comments on whether or not a 20ft container will suffice as we do not know the dimensions of the existing building. However for Ango Town, you will find that a 20/40 ft container is not adequate, more so if you want it to house a table and 4 chairs as stated in your earlier communication. A standard 20ft container's internal dimensions are L.19 ft 4.17in x W. 7 ft 8.44in x H. 7 ft 9.90in. Once the cladding and sound proofing is added, the internal width will be reduced to about 6.5 - 7 ft and that's not wide enough to house a table and four chairs arranged in the right order. Based on our experience, you will require a minimum of **THREE**, 20ft containers aligned side by side to get a large work surface area. With 3 containers, you will get about 420sq feet, about 80sq ft less of your originally intended space of 500sq feet.

8. "Meals shall be available but to be paid for by the contractor" Will the contractor equally pay for their staff accommodation at the UPDF managed facilities or will that be on the house? Might it be prudent to plan for our own tents?

9. Lastly, we need to know whether or not UPDF managed facilities have any form of electrical power and if so, will it be availed to the contractor to execute the work?

Response

1. 125 km is our goal. We have partner stations that have achieved similar range through the use of 1 kw transmitters (or below) in locations such as Banda and Faradje. If you, as a subject matter expert, believe that it will take a 3 kw transmitter to achieve this then please adjust your bid accordingly.
2. That is for each station.
3. Six for each station.
4. Some of the mics (3 each) would be spares as these stations are very remote and intended to be self-sustaining to the maximum extent possible.
5. We don't yet have a survey of the site in Ango and cannot answer that question in detail. A 300' perimeter should be more than enough for the station in Djema but I will have a more precise answer later today.
6. A free-standing mast will be considered if you believe it can be achieved economically and is in the interest of space.
7. For the workspace accommodations, we are forced to be minimalistic in the interest of cost. Some of the furniture will be placed in nearby buildings as necessary. For the station in Ango, we have not yet identified which nearby structures will be able to support the station and therefore require twice the container space.
8. Contractors must plan to bring their own tents and life support equipment. We recommend water filters, cots, tents, shelf-stable food, communications devices (satellite phones recommended), and local currency be brought as needed to support workers on site. Some items will be available from the local economy but will not be provided by the client.
9. In Djema, the UPDF facilities and some locations in town have generators. There are no UPDF locations in Ango, DRC. Contractors should plan to bring their own power sources to the sites.